

The Lessee's Right of Free Use of Produced Substances: New Wine in Old Bottles*

The move in the United States to restructure the electric power industry will present the oil and gas industry with synergistic opportunities that have been widely discussed in the trade press.¹ The commentary has focused, however, upon competition in the public utility industry and the effects of the wave of mergers that increased competition is likely to cause.² This paper will explore an incidental benefit presented to oil and gas producers by the increased flexibility of electric distribution companies — the possibility that oil or gas produced from a property can be traded, royalty free, for electricity or other services, commodities, or equipment to develop or operate the property under the terms of a lease or unit "free use" clause.³

Royalty-free production trades could benefit oil producers, lessors and their communities. A case in point is the East Kremlin Misner Unit in Oklahoma, the subject of *Golden Gas Production Company*,⁴ an order of the

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1. See, e.g., Charles J. Cicchetti, *Mergers and the Convergence of the Electric and Natural Gas Industries*, NAT. GAS, March 1997, at 8. Mergers or alliances between gas or oil suppliers and electric suppliers will give the combined companies the "ability to exploit differences in the price of gas and oil in different regions in . . . arbitrage transactions," by using gas or oil to generate electricity when hydrocarbons prices are low and selling in the spot market when hydrocarbon prices are high. Steven Lipin, *Many More Utility Takeovers Are Expected That Marry Electric and Natural-Gas Suppliers*, WALL ST. J., Mar. 20, 1997, at C2. See also *Mergers and Acquisitions Continue*, JOFEE CORPORATION UPDATE FOR THE NATURAL GAS AND ENERGY INDUSTRIES, Feb. 28, 1997, at 5, which details 19 proposed energy company mergers.

2. See, e.g., *Enron, PCG Pass FERC Merger Test But Utilities and State Still Apart*, THE ENERGY REP., March 3, 1997, at 171, reporting that the Federal Energy Regulatory Commission has approved the merger of Portland General Corp., the parent of Portland General Electric, and Enron Corp., a major gas producer and marketer, and quoting FERC Commissioner James Hoecker that gas/electric mergers are "the wave of the future." *Id.*

3. Production trades have been possible even before electric industry restructuring. Restructuring has merely focused the attention of entrepreneurs on the possibility.

4. *Golden Gas Prod. Co.*, Order No. 410,197, Mar. 10, 1997, CD No. 970000007T (Okla. Corp. Comm'n) [hereinafter Transcript]. The case involved a contract between Golden Gas Production Company and Energy Exchange Corporation, by which Golden Gas, the unit

Oklahoma Corporation Commission. Testimony before an administrative judge indicated that a royalty-free trade of oil for electricity to operate the unit would permit the production of an additional 232,000 barrels of oil over seven years at a flat price of \$20 per barrel, which would more than double incremental net revenues to the royalty owners and to Oklahoma's severance tax fund.⁵

Production trades like the one approved in Golden Gas Production Company might also benefit the nation. Gas or oil for electricity trades would likely prolong the productive life of many secondary and tertiary recovery projects in the United States⁶ and, in turn, provide a needed lift to U.S. long-term production.⁷

operator, agreed to provide Energy Exchange Corporation with crude oil in return for Energy Exchange's payment of the unit's electric bills. The author testified as an expert witness for the applicant, presenting research and analysis that had been developed independently of the Golden Gas application.

5. The East Kremlin Misner unit, covering 1,250 acres in Garfield County, Oklahoma, was established in 1988 by the Oklahoma Corporation Commission pursuant to the Oklahoma Unitization Act. Order No. 324,207, Apr. 7, 1988 (Okla. Corp. Comm'n) (issued pursuant to OKLA. STAT. tit. 52, §§ 287.1-.15). The numbers referred to are from the testimony of Robert E. Burlingame, President of Burlingame Engineers, Inc. *Id.* Exhibit 12. Mr. Burlingame estimated that the unit reservoir had originally contained 6,479,585 barrels of oil in place, of which 1,872,704 barrels, or 28.90%, had been produced by primary recovery and 1,367,366 barrels, or 21.10%, by secondary recovery to January 1, 1997. At a flat oil price of \$20 per barrel, operation of the unit would become uneconomical in 2000, after the production of an additional 107,173 barrels of oil. Permitting the royalty-free trade of oil for electricity would permit the unit to operate profitably until 2007 and produce an incremental 231,856 barrels of oil, an increment of approximately five percent. *Id.* Exhibit 11. Of course, escalating oil prices would make the economics of the venture even more attractive.

6. Compare James C. Henry, *Opportunities Await US Independents Willing to Change*, OIL & GAS J., Nov. 4, 1996, at 49, making the obvious point that cutting cash operating expenses will greatly extend the productive life of typical U.S. oil fields. In 1996, approximately 724,000 barrels per day, or eleven percent of United States oil production, resulted from enhanced techniques. Guntis Moritis, *New Technology, Improved Economics Boost EOR Hopes*, OIL & GAS J., Apr. 15, 1996, at 39. These figures may understate the importance of secondary and tertiary production. The Oil & Gas Journal study indicates, *id.* at 40, fig. 2, that enhanced oil recovery mechanisms include secondary recovery waterflood and pressure maintenance operations, as well as tertiary recovery devices. The statistics produced, however, *id.* at 44, tbl. 1, do not appear to include production from waterflood or pressure maintenance operations.

7. In 1985, domestic United States oil production averaged 8.97 million barrels per day. CAMBRIDGE ENERGY RES. ASSOCIATES & ARTHUR ANDERSON, *WORLD OIL TRENDS 1996*, at 30. It has fallen every year since then. By 1995, United States crude oil production averaged approximately 6.5 million barrels per day. *Id.*; THE ENERGY REP., Jan. 22, 1996, at 45; see also Robert J. Beck, *U.S. Oil, Natural Gas Demand Still Climbing*, OIL & GAS J., Jan. 27, 1997, at 45. At the same time, oil imports have risen. In 1996, the United States imported an average of nearly 7.35 million barrels per day. THE OIL DAILY, Jan. 27, 1997, at 7. Crude oil imports were estimated to average 7.8 million barrels per day in 1997. Robert J. Beck, *U.S. Oil, Natural Gas Demand Still Climbing*, OIL & GAS J., Jan. 27, 1997, at 45. The dual trend toward lower

The thesis of this article is that the typical "free use" clause found in most oil and gas leases or unit agreements permits the royalty-free trade of oil or gas for electricity or other products or services to operate the property. This conclusion is supported by the free use provision's history, by its judicial interpretation, and by its logic. One of the oldest lease or unit clauses can be used in a new way; it may indeed be possible and desirable to put new wine into old bottles.⁸

I. A BRIEF HISTORY OF LEASE POWER

Oil and gas produced from the premises has provided power for lease operations since early in the history of the oil and gas industry. The first wells were drilled manually by the spring-pole method developed to bore for salt.⁹ Soon, however, domesticated animals were pressed into service.¹⁰ But manual power quickly disappeared as oil prices increased and the cost of machinery decreased. The steam engine served as the primary source of power for well sites beginning in the early 1860s.¹¹

domestic oil production and higher imports presents troubling economic and political implications. See John S. Lowe, *Principles of Energy Policy*, 32 WASHBURN L.J. 1 (1992).

8. The allusion is to *Matthew 9:17* (King James): "Neither do men put new wine into old bottles: else the bottles break, and the wine runneth out, and the bottles perish: but they put new wine into new bottles, and both are preserved."

9. J. STANLEY CLARK, *THE OIL CENTURY: FROM THE DRAKE WELL TO THE CONSERVATION ERA* 39-40 (1955). Power was provided by two men moving a plank with their feet. PAUL H. GIDDENS, *PENNSYLVANIA PETROLEUM INDUSTRY 1750-1872* 209 (1947) (citing Edmond Mons, *DERRICK AND DRILL: AN INSIGHT INTO THE DISCOVERY, DEVELOPMENT, AND PRESENT CONDITIONS AND FUTURE PROSPECTS OF PETROLEUM IN NEW YORK, OHIO, AND WEST VIRGINIA* 34-39 (Jones Miller 1865)). The Chinese had employed a similar method more than a thousand years earlier. VICTOR ROSS, *THE EVOLUTION OF THE OIL INDUSTRY* 65 (1920). Colonel Drake's famous well, drilled in Titusville in 1859, was initially powered by a manual water well pump of the type normally used in houses. GIDDENS, *supra*, at 75.

10. In 1865, a producing well was achieved in Texas utilizing a rope, pulleys and a mule. C.A. WARNER, *TEXAS OIL AND GAS SINCE 1543*, 6-7 (1939).

11. GIDDENS, *supra* note 9, at 138. The early 1860s saw the introduction of smaller, smoother steam engines than had been available previously. A.N. Wood & Co. produced a portable engine that was used widely. HAROLD F. WILLIAMSON & ARNOLD R. DAUM, *THE AMERICAN PETROLEUM INDUSTRY: THE AGE OF ILLUMINATION 1859-1899*, 138-139 (1959). By 1865, portable steam engines with horsepower adequate for both drilling and pumping were available. *Id.* For example, a 40 horsepower engine introduced near Titusville operated four wells simultaneously. *Id.* at 139. When J.H.A. Bone wrote *PETROLEUM AND PETROLEUM WELLS* in 1865, the only power source he mentioned was the use of small steam engines. GIDDENS, *supra* note 9, at 262-63.

The fuel source used to power steam engines varied with market fluctuations. Wood was often the fuel,¹² but wood was expensive.¹³ Steam engines could easily consume a cord of wood, which cost from \$7-\$10, in 12 hours.¹⁴

Natural gas became a popular fuel because it was inexpensive, efficient, and available. In the early days of the oil and gas industry, natural gas was virtually worthless outside of the oil fields because gas could not be transported long distances.¹⁵ As early as 1864, gas fuel was being used to power furnaces and light engine houses.¹⁶ Shortly thereafter, there were accounts of gas being piped to as many as six engines in a field from one operating well.¹⁷ By the early 1870s, deeper drilling operations made large quantities of natural gas available.¹⁸ Inevitably, natural gas became "both the preferred and dominant fuel in old and new wells."¹⁹

As markets for natural gas developed,²⁰ and other alternative power sources became less expensive and readily available, electricity emerged as the preferred lease power source.²¹ In the 1990s, electricity is particularly

12. In Texas, as late as 1893, a steam engine was powered by slabs of wood purchased from a nearby sawmill. WARNER, *supra* note 10, at 20. The well had to be shut down when shipments from the sawmill did not arrive in a timely fashion. *Id.* at 21.

13. WILLIAMSON & DAUM, *supra* note 11, at 140.

14. *Id.*

15. Seamless pipe, which made long distance gas transportation possible, was not invented until the mid-1920s. In the early days of the oil industry, natural gas produced with oil was often flared. Entrepreneurs quickly found uses for natural gas, however, some quite innovative. One use of natural gas was to make lamp black—the material on the back of mirrors. In the last quarter of the nineteenth century, towns located near oil fields burned huge flares at their city limits to advertise their amenities.

16. WILLIAMSON & DAUM, *supra* note 11, at 140.

17. *Id.* An article published in the December 8, 1870 Titusville Morning Herald, detailing the costs associated with drilling an oil well, stated that: "Small yielding wells generally give off gas sufficient to supply half the necessary fuel for working, while large producing wells furnish enough gas to run, not only the engine which pumps them, but several others besides." GIDDENS, *supra* note 9, at 354.

18. WILLIAMSON & DAUM, *supra* note 11, at 141.

19. *Id.*

20. As the nineteenth century came to a close, natural gas companies sprang up in municipalities near gas deposits to provide heating and lighting service.

21. "Gas engines are more economical than steam, and it is now found that electricity is even cheaper than gas" DORSEY HAGER, OIL-FIELD PRACTICE 117 (1921). Electricity was also more efficient:

Electric drive practically eliminates most of the shut-downs chargeable to engines due to rod breakage; water clogged steam lines or trouble with the engine itself. Rod breakage is greatly reduced since the motor during the pumping stroke does not pick up the rods with a jerk as is the case with steam or gas engines, the speed of the band wheel being practically con-

important in waterflood operations,²² which typically involve electrically driven downhole centrifugal pumps, because of the large quantities of fluids that must first be pumped into the formation and then extracted.²³

II. A SHORT HISTORY OF ROYALTY-FREE USE OF PRODUCED SUBSTANCES

As will be discussed below, most modern oil and gas leases or unit agreements provide specifically for royalty-free use of produced substances.²⁴ Many early leases did not contain free use clauses, however.²⁵ They were not needed. The right to free use was implicit in the lease grant. Free use provisions in lease and unit agreements trace their origins to what is usually described as the implied easement of the mineral owner or lessee to use the land to obtain minerals.²⁶

It is blackletter law that the grant of an oil and gas lease gives a lessee broad authority to use the surface interest in the land covered by the lease for exploration and development. Where the mineral interest is severed from the surface interest by a lease or conveyance, the surface interest is subject to an implied easement²⁷ belonging to the mineral owner that empowers the mineral owner to make such uses of the land and the

stant during the entire revolution. The rods are therefore less liable to crystallize.

Id. at 119.

22. In *Golden Gas Prod. Co.*, the president of the production company testified that the unit electric bill had run between \$20,000 and \$25,000 per month and that "the electric bill is the primary expense on all the water floods in the state." Transcript, *supra* note 4, at 18-19.

23. For a readable explanation of the process, see ROBERT O. ANDERSON, *FUNDAMENTALS OF THE PETROLEUM INDUSTRY* 174-176 (1983).

24. See *infra* text accompanying notes 62-65.

25. See, for example, the lease forms in GEORGE BRYAN, *THE LAW OF PETROLEUM AND NATURAL GAS* 414-15 (Form I), 416-18 (Form II) (1898); LAWRENCE MILLS & J.C. WILLINGHAM, *THE LAW OF OIL AND GAS* 623-24 (Form 9) (1926); 2 W.W. THORNTON, *THE LAW RELATING TO OIL AND GAS* 1227-28, 1230-32, 1246-47 (1918).

26. The analysis in this portion of this paper is based in part upon John S. Lowe, *The Easement of the Mineral Estate for Surface Use: An Analysis of Its Rationale, Status and Prospects*, 39 ROCKY MTN. MIN. L. INST. 4-1 (1993).

27. Spanish law, under which the sovereign owned minerals, embodied a concept similar to the implied easement. In what is now the United States, the king's right derived from the Mining Ordinance of 1783, which applied to all the Spanish Americas except Peru. The ordinance entitled a surface owner to compensation in damages for use of his surface by a miner and authorized a miner's royalty to the king—*el derecho del quinto*—"the tax of the fifth part." WALLACE HAWKINS, *EL SAL DEL REY* 7-9 (Tex. St. Hist. Ass'n 1947). "As with all royal patrimonies, the sovereign's separate and severed mineral ownership on private lands rendered the surface estate servient and subject to any use the King might find necessary to mine for and produce the minerals on or beneath the lands of his subjects." *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 816 (Tex. 1972) (Daniel, J., dissenting).

substances found in it as are reasonably necessary to explore for, produce, and market the minerals from the property.²⁸

The rationale of the implied easement is generally the intent of the parties to the severance. The parties to a conveyance or lease would not enter into the transaction if they did not intend that the mineral owner would have the right to obtain the minerals. "This rule is based upon the principle that, when a thing is granted, all the means to obtain it and all the fruits and effects of it are also granted."²⁹ "[A] grant or reservation of minerals would be worthless if the grantee and reserver could not enter upon the land in order to explore for and extract the minerals granted or reserved."³⁰

Commentators and cases have also justified royalty-free use of produced substances in production operations by industry custom or public policy. An early treatise in the field noted that "[I]t is the general custom that oil gas or coal extracted from the leased premises used in operating is not chargeable with rent or royalty."³¹ In *Chartiers Block Coal Co. v. Mellon*,³² addressing the right of a surface owner who also owned oil and gas rights to drill through coal owned by a severed coal owner, the Pennsylvania Supreme Court stated that:

In such case [if the owner of the oil and gas were not permitted to drill through the coal] the public might be debarred the use of the hidden treasures which the great laboratory of nature has provided for man's use in the bowels of the earth. Some of them, at least, are necessary to his comfort. Coal, oil, gas, and iron are absolutely essential to our common comfort and prosperity. To place them beyond the reach of the public would be a great public wrong. Abounding, as our state does, with these mineral treasures, so essential to our common prosperity, the question we are considering becomes of a quasi public character. It is not to be treated as a mere contest between A. and B. over a little corner of earth.³³

28. 2 AMERICAN LAW OF PROPERTY 10.28 (1952); 1A W.L. Summers, THE LAW OF OIL AND GAS § 133, n.16 (Permanent ed. West 1954).

29. *Squires v. Lafferty*, 121 S.E. 90, 91 (W. Va. 1924); *Rocky Mtn. Fuel Co. v. Heflin*, 366 P.2d 577 (Colo. 1961); *Jilek v. Chicago, Wilmington & Franklin Coal Co.*, 47 N.E.2d 96 (Ill. 1943).

30. *Harris v. Currie*, 176 S.W.2d 302, 305 (Tex. 1943).

31. R.S. MORRISON & EMILIO D. DE SOTO, OIL AND GAS RIGHTS 99 (1920) (citing *Prichard v. Freeland Oil Co.*, 84 S.E. 945 (1914)).

32. *Chartiers Block Coal Co. v. Mellon*, 25 A. 597 (Pa. 1893).

33. *Id.* at 599. Interestingly, however, the court also refused to recognize directly the applicability of the surface use easement:

Whatever rationale they have expounded, the courts have broadly interpreted the implied easement, finding that the mineral owner or lessee has an implied right to use the land and substances in it as may be reasonably necessary to obtain the minerals.³⁴ They have given easement owners great discretion to choose the kinds of uses and the location of uses without the permission of other owners,³⁵ without payment of compensation,³⁶ and without any obligation to restore the surface.³⁷ Cases have permitted mineral owners and lessees to exercise the implied easement in virtually every manner useful to mineral exploration and

While there is some analogy between such right and the common law right of way of necessity over the surface, we quite agree with the learned judge below that it would require a large modification of the common law rule. We do not see our way clear to apply the doctrine of surface right of way to the facts of this case.

Id. Instead, the court refused to grant an injunction against the surface owner on the grounds that there was no showing of irreparable harm and urged the legislature to address the issue. The Pennsylvania legislature did not act to address the conflict, however, until 1955, when it adopted the Gas Operations Well-Drilling Petroleum and Coal Mining Act, PA. STAT. ANN. tit. 52, § 2201 (West 1955), which established a system of notices and hearings before the conservation agency to balance the rights of coal owners and oil and gas owners. The provisions of those sections are now found at PA. STAT. ANN. tit. 58, § 601.201 (West 1996).

34. The courts have also limited the kinds and manner of uses to those that are reasonable, however. The use of the easement must be non-negligent and with due regard for the rights of the surface owner. *See, e.g.,* Wilson v. Schermerhorn Oil Co., 245 P.2d 845 (N.M. 1952) (where a lessee was held liable for damage because it used a leaky wooden tank to store oil in a pasture); Amoco Prod. Co. v. Carter Farms, 703 P.2d 894 (N.M. 1985) (denying liability for damage to the surface in the absence of a showing of negligence).

35. Mingo Oil Producer v. Kamp Cattle Co., 776 P.2d 736 (Wyo. 1989); Justice v. Pennzoil Co., 598 F.2d 1339 (4th Cir.), *cert. denied sub nom.* McKinney v. Pennzoil Co., 444 U.S. 967 (1979).

36. *See, e.g.,* Robinson Drilling Co. v. Moses, 256 S.W.2d 650 (Tex. App. 1953); Bonds v. Sanchez-O'Brien Oil & Gas Co., 715 S.W.2d 444 (Ark. 1986).

37. Amoco Prod. Co. v. Carter Farms Co., 703 P.2d 894 (N.M. 1985); McLeod v. Cities Serv. Gas Co., 131 F. Supp. 449 (D. Kan. 1955), *aff'd*, 233 F.2d 242 (10th Cir. 1956); Warren Petroleum Corp. v. Monzingo, 304 S.W.2d 362, 363 (Tex. 1957); Fox v. Cities Service Oil Co., 200 P.2d 398 (Okla. 1948). *But see* Bonds v. Sanchez-O'Brien Oil & Gas Co., 715 S.W.2d 444 (Ark. 1986) (finding an implied duty of the lessee to restore the surface as nearly as practicable to pre-development condition). *See generally*, Karen L. Ellmore, *Duty of Oil or Gas Lessee to Restore Surface of Leased Premises Upon Termination of Operations*, 62 A.L.R. 4TH 1153 (1988). The right to use the land without restoring the surface is limited, however, in that the use may not destroy the surface. *See, e.g.,* United States v. Stearns Coal & Lumber Co., 816 F.2d 279 (6th Cir. 1987); Smith v. Moore, 474 P.2d 794 (Colo. 1970). The usual rationale of the limitation is that the parties to the severance do not intend that the mineral owner should own substances that require surface destruction to extract. *See* the discussion at John S. Lowe, *What Substances are "Minerals"?*, 30 ROCKY MTN. MIN. L. INST. 2-1 (1984). Victor-American Fuel Co. v. Wiggins, 746 P.2d 58, 60 (Colo. Ct. App. 1987) ("Although the right to destroy the surface may be reserved, the reservation of such right must be made clear and expressed in terms so plain that there can be no doubt.") *Id.* (emphasis added).

development, including conducting seismic surveys,³⁸ locating wells and related facilities,³⁹ destroying growing crops,⁴⁰ constructing roads⁴¹ and pipelines,⁴² and disposing of wastes produced with oil or gas.⁴³

The courts have routinely applied the implied easement to the lessee's use of gravel, clay, water, or other materials found on the land.⁴⁴ For example, even in the absence of a specific lease provision and though water generally belongs to the surface owner,⁴⁵ the courts have held that a mineral owner or lessee has the right to drill a water well and to use water found on the lease,⁴⁶ even for intensive uses such as water flooding.⁴⁷ The reasoning is that the use of water is essential to the full enjoyment of the mineral estate. The right to use water "is incident to a severed mineral interest and is not dependent upon the presence of a free use of water clause in the lease."⁴⁸

38. *Yates v. Gulf Oil Corp.*, 182 F.2d 286 (5th Cir. 1950); *Hunt Oil Co. v. Kerbaugh*, 283 N.W.2d 131 (N.D. 1979).

39. *Feland v. Placid Oil Co.*, 171 N.W.2d 829 (N.D. 1969) (salt water disposal pits); *Grimes v. Goodman Drilling Co.*, 216 S.W. 202 (Tex. App. 1919) (derrick, engine, boiler, and slush pit on a city lot close to a house); *Parker v. Texas Co.*, 326 S.W.2d 579 (Tex. App. 1959) (wellsite interfered with landowner's ability to fly airplanes from the surface).

40. *Robinson Drilling Co. v. Moses*, 256 S.W.2d 650 (Tex. App. 1953); *Adkins v. United Fuel Gas Co.*, 61 S.E.2d 633 (W. Va. 1950).

41. *Livingston v. Indian Territory Illumin. Oil Co.*, 91 F.2d 833 (10th Cir. 1937); *Humble Oil & Ref. Co. v. Williams*, 420 S.W.2d 133, 135 (Tex. 1967).

42. *Delhi Gas Pipeline Corp. v. Dixon*, 737 S.W.2d 96 (Tex. Ct. App. 1987); *Lewis v. Ada Oil Co.*, 279 So. 2d 622 (Miss. 1973).

43. A survey of the cases dealing with specific surface uses may be found in John C. Lacy, *Conflicting Surface Interests: Shotgun Diplomacy Revisited*, 22 ROCKY MTN. MIN. L. INST. 731, 734-48 (1976). See also Douglas Hale Gross, *What Constitutes Reasonably Necessary Use of the Surface of the Leasehold by a Mineral Owner, Lessee, or Driller Under an Oil and Gas Lease or Drilling Contract*, 53 A.L.R. 3d 16 (1973).

44. *B.L. McFarland Drilling Contractor v. Connell*, 344 S.W.2d 493 (Tex. App. 1961), *rev'd on other grounds*, 347 S.W.2d 565 (Tex. 1961) (clay to construct roads); *Ricks Explor. Co. v. Okla. Water Resources Bd.*, 695 P.2d 498 (Okla. 1984) (groundwater for oil and gas development).

45. See, e.g., OKLA. STAT. tit. 60 § 60 (1991) which provides in part that "the owner of the land owns water standing thereon, or flowing over its surface but not forming a definite stream"

46. *Stradley v. Magnolia Pet. Co.*, 155 S.W.2d 649 (Tex. App. 1941, writ *ref'd*).

47. *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808 (Tex. 1972). Texas now restricts that right, however, by TEXAS WATER CODE § 27.0511(c)-(d), which requires the conservation agency to consider whether the lessee has other reasonable solid, liquid or gaseous substances available—a sort of statutory accommodation doctrine. For discussion of the accommodation doctrine, see John S. Lowe, *supra* note 26, at ch. 4.03[2].

48. 1 EUGENE O. KUNTZ, *THE LAW OF OIL AND GAS* § 3.2(d)(3) (1987) (citing *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972)); see also *Ricks Explor. Co. v. Okla. Water Resources Bd.*, 695 P.2d 498 (Okla. 1984).

The implied easement for reasonable use created by a lease or conveyance of minerals is not limited to use of the surface or substances in the soil that belong to the owner of the surface interest. The courts have also interpreted the easement to permit the royalty-free use of other mineral substances, such as coal, oil and gas, in production operations even without the authority of a free use clause:

The right to take the oil carried with it by implication the right to tap the gas pockets and to bring to the surface so much of the gas as was necessary in the proper drilling of oil. The grant of the oil carried with it a grant of the way, surface, soil, water, gas and the like essential to the enjoyment of the actual grant of the oil.⁴⁹

Twentieth Century oil and gas leases usually state specifically that the lessee has the right of "free use" of production from the leased property. Forms probably include express language because of the interest of both the lessee and the lessor in avoiding disputes.⁵⁰ Where the free-use clause is located in the lease varies, however. Some lease forms provide for the free use of produced substances for fuel in the granting clause.⁵¹ Other leases provide for free use of produced substances in the royalty clause.⁵² Yet other

49. *Guffey v. Stroud*, 16 S.W.2d 527, 528 (Tex. Comm'n App. 1929) (the lessee was the owner of the oil only).

50. Similar concerns cause the parties to insert detailed surface use provisions in leases, usually in the granting clause or in an addendum.

51. For example, a New Mexico lease form states:

the lessor does hereby grant, demise, lease and let unto the said lessee, exclusively, for the sole and only purpose of exploration, development and production of oil and gas . . . with right for such purposes to the free use of oil, gas, casing-head gas or water from said lands, but not from lessor's water wells

State of New Mexico Development and Exploratory Forms, 6 W. L. SUMMERS, *THE LAW OF OIL AND GAS* §1151B, at 42, 57 (Lowe Supp. 1996). The New Mexico state forms also underscore the right of free use in the royalty clause; "Subject to the free use without royalty, as hereinbefore provided, the lessee shall pay the lessor as royalty" *Id.* at 43, 58. For other granting clause free use provisions, see, VICTOR H. KULP, *CASES ON OIL AND GAS* 492-98 (Form 2) (West 1924); LAWRENCE MILLS AND J.C. WILLINGHAM, *THE LAW OF OIL AND GAS* 625-27 (Form 10), 627-32 (Form 11, Series 1908 Five Civilized Tribes), 632-38 (Form 12, New Five Civilized Tribes) (Callaghan 1926); A.J. THUSS, *TEXAS OIL AND GAS* § 3, at 460-66, § 7, at 485-92 (Vernon 2d ed. 1929); A.E. WILKINSON & J.A. RICHARDSON, *THE LAW OF OIL AND NATURAL GAS* 140-41 (Form V), 141-42 (Form VI) (Steck 1915); 2 W.W. Thornton, *THE LAW RELATING TO OIL AND GAS* 1243-45, 1248-49, 1508-13 (federal patent) (Anderson 1918); W.L. SUMMERS, *THE LAW OF OIL AND GAS* § 263, at 755-59 (Vernon 1927); RICHARD W. HEMINGWAY, *WEST'S TEXAS FORMS* §§ 3.12-.13, at 189-212 (2d ed. West 1991).

52. For example: "Lessee shall pay Lessor as royalty . . . No royalty shall be payable on production used for the benefit of the leased premises or for the benefit of both the leased premises and other lands." RICHARD W. HEMINGWAY, 28 *WEST'S LEGAL FORMS* § 23.41, at 361

leases include the free use provision as part of a separate "miscellaneous" clause.⁵³ The location of the clause in the lease does not appear significant. Regardless of the location of the free use clause in a lease, the statement of free use represents the express recognition of the lessor and lessee that it is contrary to the purposes of the lease to require that royalty be paid on oil or gas used for lease operations.

The parties' intent that produced substances may be used royalty-free for operations is also express in most unit agreements. When a unit is established for secondary or tertiary recovery,⁵⁴ the unit agreement⁵⁵ generally incorporates "free use" language similar to that found in leases, but with even more detail.⁵⁶

(2d ed. West 1986). *See also*, A.J. THUSS, TEXAS OIL AND GAS § 4, at 467–71 (2d ed. Vernon 1929); 2 W.W. THORNTON, THE LAW RELATING TO OIL AND GAS 1225–26 (Anderson 1918); W.L. SUMMERS, THE LAW OF OIL AND GAS § 269, at 765–72 (federal lease) (Vernon 1927); 6 W.L. SUMMERS, THE LAW OF OIL AND GAS §§ 1150–53, at 45–89 (Permanent ed. 1967); RICHARD W. HEMINGWAY, 28 WEST'S LEGAL FORMS § 23.34, at 298–304, § 23.37, at 320–27 (2d ed. West 1986); RICHARD W. HEMINGWAY, WEST'S TEXAS FORMS § 3.3, at 121–29, §§ 3.5, 3.6, at 131–43 (2d ed. West 1991); 7 EUGENE O. KUNTZ, THE LAW OF OIL AND GAS § 136.3, 136.4, 136.16, at 8-23, 68-73 (Anderson 1993).

53. For example: "Use Of Oil, Gas And Water For Operations. Lessee shall have the free use of oil, gas and water from the leased premises . . . for all operations hereunder . . ." W.L. SUMMERS, THE LAW OF OIL AND GAS § 1149 at 7–22 (Lowe Supp. 1996); *see also*, RICHARD W. HEMINGWAY, 28 WEST'S LEGAL FORMS §§ 23.35, 23.36, at 305–16, § 23.39, at 342–53, § 23.42, at 368-72 (2d ed. West 1986); RICHARD W. HEMINGWAY, WEST'S TEXAS FORMS § 3.4, at 129–31, § 3.10, at 171–82, § 3.15, at 228–33 (2d ed. West 1991); 7 EUGENE O. KUNTZ, THE LAW OF OIL AND GAS § 136.2, at 3–7, § 136.17, 136.18, at 74–83 (Anderson 1993); 6 W.L. SUMMERS § 1148, at 7–17, § 1160, at 95–104 (Lowe Supp. 1996).

54. After some period of time, ranging from several months to many years, the natural or "primary" pressure in the reservoir rocks may drop to such a level that petroleum will no longer flow into the well bore. At that time, the operating company will consider artificially enhancing the reservoir pressure by injecting water or gas into the reservoir. This is commonly referred to as *secondary* recovery, reflecting that it is generally a second stage of operations. In more advanced enhanced recovery projects, fire flooding and complex chemical techniques are used to improve reservoir pressure. These devices are often referred to as *tertiary* recovery. In fact, however, these are terms of art, not science.

55. Other oil and gas contracts also commonly recognize the right of free use. For example, Article VI.C. of the A.A.P.L. Form 610 Model Form Operating Agreement - 1982 provides that: "Each party shall take in kind or separately dispose of its proportionate share of all oil and gas produced from the Contract Area, *exclusive of production which may be used in development and producing operations and in preparing and treating oil and gas for marketing purposes . . .*" (emphasis added).

56. For example, the American Petroleum Institute's Model Form of Unit Agreement—probably the most commonly used unit agreement form—states that its purpose is "to promote conservation and *increase the ultimate recovery of Unitized Substances . . .*" API Model Form 5U01, 4th ed., June 1, 1993, Witnesseth provision (emphasis added). Article 3 of that form provides that the unit is to be operated as if the property were subject to a single lease:

All Oil and Gas Rights . . . are hereby unitized . . . so that Unit Operations

Narration of this brief history of royalty-free use of produced substances puts into perspective the specific language found in leases and

may be conducted with respect to the Unitized Formation as if the Unit Area had been included in a single lease executed by all Royalty Owners, as lessors, in favor of all Working Interest Owners, as lessees, and as if the lease had been subject to all the provisions of this Agreement.

Id. at lines 30–35. Article 6.1 recognizes the right of royalty free use of production by limiting production subject to the tract allocation to “Unitized Substances *produced and saved.*” *Id.* Art. 6.1, at line 22. (Emphasis added). Article 6.2, in turn, provides that “royalty . . . shall . . . be determined by dividing the Unitized Substances allocated to the Tract by the number of wells on the Tract capable of producing Unitized Substances” *Id.* Art. 6.2, at lines 3–7. Finally, Article 8 provides specifically for royalty free use:

8.1 USE OF UNITIZED SUBSTANCES. Working Interest Owners may use or consume Unitized Substances for Unit Operations, including by not limited to the injection thereof into the Unitized Formation.

8.2 ROYALTY PAYMENTS. No royalty, overriding royalty, production, or other payments shall be payable on account of Unitized Substances used, lost, or consumed in Unit Operations.

Id. Art. 8, at lines 25–29.

Non-form unit agreements commonly include similar language. In the Golden Gas application to the Oklahoma Corporation Commission, for example, the Unit Plan stated its goals to be that “a greater ultimate recovery of oil or gas may be had . . . , waste prevented and the correlative rights of the respective owners protected.” (Emphasis added.) Article 3.1 of the Unit Plan provided that the Unit would be operated as if it were a single lease:

[A]ll oil and gas rights . . . are hereby unitized . . . so that Unit Operations may be conducted as if the Unitized Formation had been included in a single lease executed by all Royalty Owners, as Lessors, in favor of all Lessees, and as if the lease had been subject to all the provisions of this Plan of Unitization.

Articles 5.2 and 9.5 recognized the right of royalty free use of production by excepting production used in unit operations from the tract allocation subject to royalty:

5.2 Allocation to Tracts: All Unitized Substances that are produced, *except those used in Unit Operations* or unavoidably lost, shall be allocated to the several tracts in accordance with the respective Tract Participations. . . . (Emphasis added.)

9.5 Royalty Owners Free of Cost: A one-eighth (1/8) part of the Unitized Substances allocated to each tract shall . . . be regarded as royalty . . . free and clear of all costs

Article 6 provided specifically for royalty free use:

6.1 Use of Unitized Substances: The Unit Operator may use or consume as much of the Unitized Substances as it deems necessary for Unit Operations, including but not limited to the injection thereof into the Unitized Formation. (Emphasis added.)

6.2 Royalty Payments: No royalty, overriding royalty, production, or other payments shall be payable upon, or with respect to, Unitized Substances used or consumed in Unit Operations or which may otherwise be lost or consumed in the production, handling, treating, transportation, or storing of Unitized Substances. (Emphasis added).

unit agreements. The lease or unit free use clause is superfluous. Oil and gas used for development and to maintain or increase production would not generally be subject to royalty even if there were no free use clause because of the lessee's implied easement for reasonable use.⁵⁷ Free use clauses in lease and unit agreements expressly state an implied right to royalty-free use of production for operations recognized since the oil and gas industry's inception.⁵⁸ Logically, the parties to leases and unit agreements must be

57. As Professor Kuntz states:

As it applies to oil, gas, and other substances, the free use of oil, gas, and water clause is probably descriptive of the rights of the lessee that exist in absence of the clause. . . . [T]he substances may be covered by the granting clause, in which case the lessee is entitled to use the substances as an owner. . . . If the granting clause does not expressly cover the substance in question, there is nevertheless an implied grant of rights that are necessary to the exercise of the rights expressly granted, unless they are expressly excluded.

4 EUGENE O. KUNTZ, *THE LAW OF OIL AND GAS* § 50.2(c) (Anderson 1990) (citations omitted).

58. Produced substances that are used for lease operations also may be royalty-free because they fail to fall within the words in typical royalty clauses that production subject to royalty be "produced and saved." As Professor Kuntz states:

The common pattern which exists in all of the provisions for the payment or delivery of royalty is that the liability for the royalty is dependent upon a capture and saving of the described substance. If the lessee should be negligent in operating and such negligence results in a loss of oil, gas, or other minerals, the lessor may recover damages for breach of an implied covenant. The lessee should not, however, be liable on the covenant contained in the royalty clause to pay royalty on any escaped or uncaptured substance, because the covenant in such clause is to pay royalty only on substances covered by the royalty clause that are produced and saved.

Federal statutes and statutory interpretation reflect a similar premise that royalty should be due only on production "produced and saved." Until 1946, § 17 of the Mineral Leasing Act of 1920 provided for royalty on the "amount or value of production," but the Department of Interior never sought royalty on production used in operations. *Gulf Oil Corporation v. Andrus*, 460 F. Supp. 15, 16-17 (D.C. C.D. Calif. 1978). In 1946, Congress amended § 17 to provide specifically that royalty would be due only on "production removed or sold from said lease" which the courts held was intended "to ratify the Department's earlier interpretation of that section, thereby exempting from royalty payments oil and gas produced from and used on the leasehold for beneficial purposes." *Id.* at 18. *Marathon Oil Company v. Andrus*, 452 F. Supp. 548 (D.C. Wyo. 1978). Current regulations exclude from royalty "oil . . . used on, or for the benefit of the lease, including that oil used off-lease for the benefit of the lease where such off-lease use is permitted by the MMS or BLM, or appropriate. . . ." 30 C.F.R. § 202.100(b)(1) (1998).

3 EUGENE O. KUNTZ, *THE LAW OF OIL AND GAS* § 42.7(a) (Anderson 1989).

deemed to have contracted with that history in mind.⁵⁹ Logically, also, the free use clause in an oil and gas lease or unit plan must be interpreted in light of the implied easement for reasonable use. The history of royalty-free use is, after all, a part of the usage of the trade.⁶⁰ Thus, the test of whether free use is permitted should be whether the lessee's use is reasonable in light of the purpose of the lease, which is to find and produce oil and gas to the profit of both the lessor and lessee.⁶¹

III. JUDICIAL INTERPRETATION OF THE FREE USE CLAUSE

The sparse case law, all arising out of Texas, is consistent with the analysis above suggesting that the free use clause should be interpreted broadly. The courts have rejected cramped interpretations of free use clauses, adopting a liberal purpose-oriented analysis that gives lessees

59. The Oregon Supreme Court stated the point in a dispute over the sale of horsemeat: The flexibility of or multiplicity in the meaning of words is the principal source of difficulty in the interpretation of language. Words are the conduit by which thoughts are communicated, yet scarcely any of them have such a fixed and single meaning that they are incapable of denoting more than one thought. In addition to the multiplicity of meaning of words set forth in dictionaries there are meanings imparted to them by trade customs, local uses, dialects, telegraphic codes, etc. One meaning crowds a word full of significance, while another almost empties the utterance of any import. . . . It is said that a court in construing the language of the parties must put itself into the shoes of the parties. That alone would not suffice; it must also adopt their vernacular.

Hurst v. Lake & Co., Inc., 16 P.2d 627, 629-30 (Or. 1932) (internal citations omitted); see U.C.C. § 1-205(2); see also Nanakuli Paving & Rock Co. v. Shell Oil Co., 664 F.2d 772 (9th Cir. 1981).

60. Professor Farnsworth, analyzing the lumber industry in Wisconsin, states the justification of looking to usage in contract interpretation:

Generality in contract concepts . . . was a source of strength, so far as it meant that the legal order could efficiently and smoothly adapt itself to varied circumstances. But there was weakness, so far as contract law achieved this generality by intense devotion to a quite limited range of policies, abstracted from the living context in which they arose. . . . [By permitting proof of usage to buttress this weakness,] lumber contract case law made its most distinctive adaptation to the lumber industry.

E. ALLEN FARNSWORTH, CONTRACTS § 7.13, at 530 (2d ed. 1990). Another contracts scholar summarizes the point as follows:

The principle on which usages are so annexed has been said to rest on the "presumption that in such transactions the parties did not mean to express in writing the whole of the contract by which they intended to be bound, but to contract with reference to those known usages."

LAURENCE P. SIMPSON, HANDBOOK OF THE LAW OF CONTRACTS 207 (West 1965) (citing and quoting Hutton v. Warren, 1 Mees & W. 466 (1836)).

61. Brewster v. Lanyon Zinc Co., 140 F. 801, 810 (8th Cir. 1905).

broad discretion to use production free of royalty so long as the use is reasonably necessary to advance production. In *Armstrong v. Skelly Oil Co.*,⁶² the Fifth Circuit relied upon the free use clause in refusing to second-guess a lessee's operating decisions. The lessee had first injected gas into the well casing to stimulate oil production and then contracted to turn the wet gas produced with oil through a gasoline extraction plant and turn the residue gas over to a carbon black plant for fifty percent of the proceeds of the sale of carbon black. The court said: "[t]here is no doubt that [the lessee] had the right to use all the gas produced on the land without cost, as it was reasonably necessary to properly work the property and to recover the oil produced in the most economical manner."⁶³

In *Munger v. Waggoner*,⁶⁴ the free use clause shielded a lessee from paying royalty where the lessee exchanged crude oil for fuel oil that it used in lease operations. There, the Texas Court of Appeals in Amarillo noted:

The plaintiff [the lessee] was entitled to use the crude oil produced on the land in his operations on that land. For the reason that crude oil burns more rapidly than does fuel oil and that 1 barrel of fuel oil will last as long and is as serviceable as 1 1/3 barrels of crude oil, the plaintiff made the exchange and received in return and used in such operations on said land an equal amount of fuel oil from the refinery . . . Hence the plaintiff was only doing under the contract what he ought to have done; that is, make the best use of the oil to the advantage of all concerned.⁶⁵

In *Tidewater Associated Oil Co. v. Clemens*,⁶⁶ the Texas Court of Appeals in Texarkana followed similar reasoning, but without noting *Munger*. The *Tidewater* court relied on the free use clause to reject a lessor's claim for royalty on residue gas returned to the lease for use in operations after gasoline had been extracted. The lessor contended that the residue gas was part of the purchase price for the sale of the produced gas.⁶⁷ The court, however, said that the lease free use clause "limits [the lessee's] free use of the residue gas to that produced from the land, and to that used for operations thereon. In retaining the right to use the gas after instead of using it before the gasoline has been extracted therefrom, [the lessee]

62. *Armstrong v. Skelly Oil Co.*, 55 F.2d 1066 (5th Cir. 1932).

63. *Id.* at 1068.

64. *Munger v. Waggoner*, 260 S.W. 696 (Tex. App. 1924).

65. *Id.* at 697.

66. *Tidewater Associated Oil Co. v. Clemens*, 123 S.W.2d 780 (Tex. App. 1938).

67. *Id.* at 783.

violated no provision of the lease contract but acted to [the lessor's] advantage in increased rentals."⁶⁸

Mitchell Energy Corp. v. Blakley,⁶⁹ the most recent decision, is the broadest of all. The lessor in *Mitchell* attempted to distinguish the holdings in *Munger* and *Tidewater* to claim royalty on the sale of gas produced from one well to a drilling contractor for use in drilling another well on the lease. The lessor contended that *Munger* should be limited to situations where there was a sale or trade of production for a more economical fuel. The Texas Court of Appeals in Fort Worth, however, indicated that the key to *Munger* was that the fuel oil for which crude oil was traded was used "exclusively for the drilling operations under the lease," as was true in the case before it.⁷⁰

The *Mitchell* lessor also argued that *Tidewater* was distinguishable by the language of the free use provision. In *Tidewater*, the free use clause provided simply that "Lessee shall have the right to use free of cost, gas, oil and water produced on said land for all operations thereon" ⁷¹ In *Mitchell*, the clause stated that "Lessee shall have free use of oil, gas, coal and water from said land . . . for all operations hereunder, and the royalty on oil, gas and coal shall be computed after deducting any so used."⁷² Apparently, the lessor's argument was that since the lessee made a profit from the transaction with the driller, the lessor should receive the royalty share.⁷³ The second part of the free-use clause required that the use be by the lessee, rather than by a contractor hired by the lessee.⁷⁴ The court summarily rejected the Lessor's contention based upon the "plain meaning" of the free use clause.⁷⁵ "In our view the second clause of the free-use provision expressly precludes the payment of royalty on any gas used in the drilling operations even on gas sold by the lessee to the driller for that purpose."⁷⁶

Mitchell is instructive, too, in that it supports the intuitive principle that to be royalty-free the lessee's use need not be shown to have actually benefited lease production or to be certain to benefit lease production, but merely to have been reasonably likely to have benefited lease production; the lessee does not have to be right, so long as he acts as a reasonable

68. *Id.* at 784.

69. *Mitchell Energy Corp. v. Blakley*, 560 S.W.2d 740 (Tex. App. 1978).

70. *Id.* at 744.

71. *Tidewater*, 123 S.W.2d at 784.

72. *Mitchell*, 560 S.W.2d at 743 (emphasis added).

73. *Id.* at 744.

74. *Id.* at 745.

75. *Id.* at 744-45.

76. *Id.* at 744.

prudent operator.⁷⁷ Unlike the earlier cases discussed above, *Mitchell* contains no language that might infer that the lessee's right of free use exists only when the lessee's use in fact has benefited or would benefit the lessor.⁷⁸

The *Armstrong* opinion also supports the proposition that the royalty-free use need only be reasonably necessary. In *Armstrong*, the court stated the "fair and reasonable construction" of the language to be that "the lessee had the right to use all of the gas produced, whether from oil wells or gas wells only, to stimulate the production of oil, if in the exercise of good judgment it was reasonably necessary."⁷⁹ What is reasonably necessary must be determined by reference to the purpose of the lease, which is to find and produce oil and gas.⁸⁰

While I have found no cases directly on point from jurisdictions other than Texas, a broad interpretation of the free use provision is as easily supported by a "cooperative venture" approach to lease interpretation as by a "plain terms" approach.⁸¹ The underlying logic of the cases interpreting free use clauses broadly is that the purpose of the lease is to obtain and maintain production to the mutual benefit of the lessor and the lessee.⁸²

IV. INTERPRETATIVE LIMITS

Ultimately, any discussion of the scope of the lease or unit free use clause must consider how far the right of free use might extend. For example, could a lessee rely on the free use clause to barter oil or gas production for a well workover, for a recompletion, for drilling a new well, or for the pumper's wages? Extending free use so far would deprive royalty owners of substantial revenues, at least in the short term.

77. In the context of the implied easement, the courts have said that the duty of the lessee is to conduct operations as would a reasonably prudent person; i.e., in the usual way and consistent for the purpose of the lease. *Sinclair Prairie Oil Co. v. Perry*, 191 S.W.2d 484, 486 (Tex. App. 1945).

78. See *supra* text accompanying notes 62–68.

79. *Armstrong*, 55 F.2d at 1068.

80. *Robinson v. Robbins Petroleum Corp.*, 501 S.W.2d 865, 867 (Tex. 1973).

81. Other royalty disputes have been dealt with by the courts in various jurisdictions either by applying the "plain terms" of the lease or by treating the lease as a "cooperative venture" between the lessor and the lessee and looking beyond the specific language of the lease to the parties' intent, to implied covenants, or to fundamental fairness. See John S. Lowe, *Defining the Royalty Obligation*, 49 SMU L.J. 223 (1996), reprinted in 33 PUB. LAND & RES. L. DIG. 257 (1996).

82. See, e.g., *Central States Prod. Corp. v. Jordan*, 86 P.2d 790 (Okla. 1939). This principle also underlies the extensive jurisprudence on implied covenants in oil and gas leases. See, e.g., *Brewster v. Lanyon Zinc Co.*, 140 F. 801 (8th Cir. 1905).

It is possible, of course, that a free use clause will contain limiting language.⁸³ Many leases specifically restrict the use of water, for example, with a phrase such as "except water from the wells of Lessor"⁸⁴ or "except water from lessor's wells or tanks."⁸⁵

Nothing in the wording of most free-use clauses, however, suggests either an explicit or implicit limitation to the lessee's right to exchange production for services or materials. Indeed, the wording of most free use provisions suggests that the free use of production is not limited to direct uses to power equipment on the lease or unit, but extends to any use in support of lease operations.⁸⁶ Leases and unit agreements usually provide that the operator's right to free use shall be "for its operations thereon . . .,"⁸⁷ which may require a less direct relationship between the manner of use and the location of the operations than "in its operations."⁸⁸ Even a free use clause that provides for the producers right of royalty-free use by "in its operations," probably is not sufficient to limit the right to direct uses on the lease. First, the distinction between "for" and "in" is a tenuous reed upon which to hang overturning the strong lines of cases applying the implied easement and interpreting free use clauses. Second,

83. 4 Eugene O. Kuntz, *supra* note 57, § 50.2(c). Some lessor-oriented leases merely omit a free use clause, however, which the analysis in this article suggests would leave the parties still subject to the common law implied easement. See, e.g., Oklahoma Mineral Owners Association Form 88 (1989) (Allen), reprinted in EUGENE O. KUNTZ ET AL., FORMS MANUAL FORM # 4, at 18–19 (2d ed. West 1993).

Lessors who wish to exclude the lessee's right of free use should specifically exclude it. Royalty-free use may also be barred by inconsistent language in the lease or in authorizing legislation or regulations. An Administrative Law Judge found that the federal government was due royalty on crude oil used to fuel a cogeneration facility that produced electricity which was sold to a utility and then purchased back and consumed on the lease in *Petro-Lewis Corp.*, 96 Int. Dec. 127, 108 IBLA 20 (1989). The judge reasoned that, while no royalty would have been due had the producer used the oil to produce electricity it then used on the premises, the form of the transaction was such that the oil was "produced and sold" within the meaning of Department of Interior regulations and "form has its own substance." 96 Int. Dec. at 133–34.

84. Paragraph 6, Producers 88—Paid Up, Rev. 5-60, No. 2, P&M Printing (Denver CO).

85. Paragraph 7, Producer's 88—Producer's Revised 1981 New Mexico Form 342P, Paid-up, Hall-Poorbaugh Press, Roswell, N.M. Such a limitation is very common and found in many of the forms referred to elsewhere in this article.

86. See the examples quoted *supra* notes 51–53, 83.

87. The leases in all of the four cases discussed *supra* Part III provided for royalty-free use of production "for . . . operations," as does the API Unit Agreement form and the Plan of Unitization for East Kremlin Misner Unit discussed in Part II.

88. WEBSTER'S NEW TWENTIETH CENTURY DICTIONARY OF THE ENGLISH LANGUAGE, UNABRIDGED 714 (2d ed. 1983). Cf. BRIAN A. GARNER, A DICTIONARY OF MODERN LEGAL USAGE 78 (Oxford 1995) ("If because points out a direct cause-effect relationship, for signals a less direct relationship . . .").

"in" may refer to the sequence of the use in the course of" or "because of" as well as the place of use.⁸⁹

There is case support, however, for the position that the lessee's implied easement is implicitly restricted to uses directly related to lease operations. In *Vogel v. Cobb*,⁹⁰ the court held that a lease free use clause granting the right to "water produced on said land for its operations thereon" did not permit the lessee to use water to supply houses constructed on adjacent lands to house employees working on the leased property.⁹¹

Other cases suggest that the right of free use does not extend to substances that the parties reasonably intended would be reserved to the lessor:

Clearly this [the free use clause] does not mean that lessee was entitled to use water from the private pond or tank of the lessor, but means water produced by lessee by drilling wells, building tanks, or ponds, or from running streams, etc. Otherwise, under such clause, an oil and gas lessee could enter upon the premises of the lessor and use all the water impounded by lessor for private use and thus deprive the lessor of water for his stock.⁹²

This reasoning suggests that the free use right will not extend to production exchanges to cover costs that the lessee and the lessor might reasonably expect would be borne solely by the lessee.⁹³ Capital expenditures for drilling, completing or reworking wells surely fall into this category.

A limit to royalty-free production trades is bolstered by the history of royalty-free use, as well. The same history that supports a broad interpretation of the right of free use suggests that free use be limited to lease or unit power and production operations.⁹⁴ Historically, operators

89. WEBSTER'S NEW TWENTIETH CENTURY DICTIONARY OF THE ENGLISH LANGUAGE, UNABRIDGED, *supra* note 88, at 918.

90. *Vogel v. Cobb*, 141 P.2d 276 (Okla. 1943).

91. This case may also be seen an application of the general principle that an easement, express or implied, may not be used for the benefit of any property other than the dominant estate. See JOHN S. LOWE, OIL AND GAS LAW IN A NUTSHELL 177-78 (3d ed. 1995).

92. *Arnold v. Adams*, 294 P. 142, 146 (Okla. 1930); see also *Mohawk Drilling Co. v. Wolf*, 262 P.2d 892 (Okla. 1953).

93. This analysis also suggests that the court in *Mitchell* may have gone too far in permitting the lessee to make a profit from the sale of lease production that was not shared with the lessor.

94. Another way to make this argument would be to state it in terms of custom and practice, rather than history. Custom and practice and history are closely related. The Uniform Commercial Code defines "usage of trade" as a "practice or method of dealing having such regularity of observance in a place, vocation or trade as to justify an expectation that it will be observed with respect to the transaction in question." U.C.C. § 1-205(2); see *Nanakuli Paving & Rock Co. v. Shell Oil Co.*, 664 F.2d 772 (9th Cir. 1981).

have used produced substances as a power source for drilling or operating equipment or as feedstock for enhanced recovery.⁹⁵ The parties may reasonably expect that production trades be limited to those uses.

The issue, however, is clearly debatable. Arguably, the cases discussed above illustrate the courts' interpretation and the reasonable expectations of the parties that the producer's use of production will be royalty-free so long as the lessee's disposition of production is reasonably necessary to enhance development and production. The lease or unit free use clause is an explicit statement of the mineral lessee's broad implied right to use produced substances reasonably to produce more substances. The test is reasonableness of the use in light of the purpose of the lease. By this test, an exchange of production should be permissible so long as it is reasonably necessary to obtain incremental production, which will be to the ultimate advantage of both the lessor and the lessee. Just as the scope of activities permitted by an easement may change over time,⁹⁶ so should those permitted by the free use clause.⁹⁷

V. CONCLUSION

If American oil and gas producers are to survive, much less prosper, in world competition, they must continue to work smarter, as well as harder. Working smarter will require that they embrace new technology and new management practices.⁹⁸ Working smarter will also require they reexamine "old" provisions in leases and unit agreements that may permit them to do business in new ways.

Royalty-free production trades for electricity are one way to make continued production of old oil and gas fields viable, to the advantage of producers, royalty owners, the state and the nation. While questions remain,⁹⁹ the possibility that the new wine of production trades for other services or materials may be placed in the old bottles of lease or unit agreement free use of clauses should be considered.

95. See *supra* text accompanying notes 16–31.

96. For discussion, see ROGER A. CUNNINGHAM, ET AL., *THE LAW OF PROPERTY* § 8.9, at 459 (2d ed. 1984).

97. Clearly, however, it would be advisable for drafters, whether they represent lessors or producers, to address specifically the scope and limitations of royalty-free use of production in the leases and unit agreements.

98. Henry, *supra* note 6.

99. This paper does not address regulatory issues that are likely to vary from state to state. See also *supra* text accompanying notes 83-97, regarding the limits of the free use provision.

